

Agricultural Situation and Prospects in the Central and Eastern European Countries



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Czech Republic

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The manuscript has been prepared by Rob Peters with the assistance of Martin Strittmatter. The author accepts full responsibility for any errors which could still remain in the text. The closing date for data collection was end of April 1995.

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Foreword

The European Union has expressed its intention to offer membership to those countries in central and eastern Europe with which it has an association agreement (see box below). Agriculture has been identified as an important issue for future accession, due to its relative size in some of the Central and Eastern European Countries (CEECs) and to the difficulties there might be in extending the Common Agricultural Policy in its current form to these countries.

A series of ten country reports on the agricultural situation and prospects in the CEECs has been prepared by the services of the European Commission in collaboration with national experts and with the help of scientific advisers. The ten countries covered are Bulgaria, the Czech Republic, Hungary, Poland, Romania and Slovakia, which are associated to the European Union through the Europe Agreements, and Estonia, Latvia, Lithuania and Slovenia, which are in the process of being associated.

The country reports attempt to provide an objective analysis of the current situation in agriculture and the agro-food sector in the CEECs and an assessment of the developments to be expected in the medium term.

Extract conclusions Copenhagen summit of 22-23 June 1993

"The European Council today agreed that the associated countries in Central and Eastern Europe that so desire shall become members of the European Union. Accession will take place as soon as an associated country is able to assume the obligations of membership by satisfying the economic and political conditions required.

Membership requires that the candidate country has achieved stability of institutions guaranteeing democracy, the rule of law, human rights and respect for and protection of minorities, the existence of a functioning market economy as well as the capacity to cope with competitive pressure and market forces within the Union. Membership presupposes the candidate's ability to take on the obligations of membership including adherence to the aims of political, economic and monetary union."

About the data....

The data used in this country report are derived from a CEEC dataset established by DG VI in cooperation with other services of the European Commission and with external experts. Data have been selected after a number of analyses carried out by both external research institutes¹ and DG VI services. They originate from various sources: FAO, OECD, World Bank, United Nations, USDA, national statistics, economic institutes and the European Commission (DG II, Eurostat).

The main objective was to obtain a dataset which was as coherent as possible, offering a good comparability of data.

For the agricultural data, the starting point of the analysis was the work carried out by Prof. Jackson (Institute for Central and East European Studies, Katholieke Universiteit Leuven, Belgium), who compared figures from OECD, FAO and the national statistics of Poland, Hungary, the Czech Republic, Slovakia, Bulgaria and Romania. The conclusion of this study was that the FAO was the most reliable source because these data were standardized, which was not the case for the two other sources.

Moreover, DG VI services compared FAO and USDA data and although for the crop sector there were no important differences, this was not the case for the animal sector where big discrepancies were apparent. This is due to different methodological approaches and also to different coefficients used to transform live animal weight in carcass weight.

In general the FAO data for agriculture were used, but for certain countries and/or for certain products, and in particular for the most recent years, the figures were adjusted or replaced by data from other sources, after discussion with country specialists and with FAO statisticians. In such cases, FAO coefficients and standards were used to avoid a break in the time series.

Despite all efforts to create a coherent, reliable and up to date dataset, all figures presented in this report should be interpreted with care. Significant changes in data collection and processing methods have sometimes led to major breaks in historical series as the countries concerned have moved from centrally planned to market economies. One general impression is, according to some experts^{1,2}, that these problems may have led to overestimate the decline in economic activity in general and of agricultural production in particular in the first years of transition, data from 1989 and before being somewhat inflated and data after 1989 underrecording the increase in private sector activity.

¹ - M. JACKSON and J. SWINNEN (1995) : A statistical analysis and survey of the current situation of agriculture in the Central and Eastern European Countries, report to DG I, European Commission.

- W.J. STEINLE (1994) : First Study on Data Collection on "Visegrad" Countries and ECO Countries, Empirica Delasasse, Eurostat.

² S. TANGERMANN and T. JOSLING (1994): Pre-accession agricultural policies for central Europe and the European Union, study commissioned by DG I, European Commission.

Executive summary

General situation

The Czech Republic became an independent nation on 1 January 1993, when Czechoslovakia was split into two separate countries. After the downfall of the ancien regime in 1989 differing views on the pace of economic reform drove the two states apart.

In 1994 the Czech economy turned round and grew by an estimated 2.6% after four years of contraction induced by the transition. For 1995 and following years a further increase in the rate of growth is expected in the range of 4 to 5%, with inflation in the single digit range, a balanced budget and a stable exchange rate.

Agriculture

Although the economy as a whole reached a turning point in 1994, agricultural production continued to decline.

Currently, the share of agriculture in total GDP is about 3%, while its share in employment is around 6%, both of which are relatively low compared to most other CEECs and some EU member states.

The decline in agricultural production of over 25% since 1989 (compared to about 20% for the economy as a whole) was strongest in the livestock sector, which has consequently seen its share in agricultural output drop from 60 to 55%. The volume of production in the crop sector declined to around 80% of its pre-transition level.

Landuse

Of the total area of 7.9 mio ha in the Czech Republic over half is used for agricultural purposes and a third is covered with woods. Of the agricultural area three quarters is arable land, half of which is planted to cereals, mainly wheat and barley. The other arable crops - oilseeds, sugarbeet and potatoes - are of lesser importance in land use terms. In recent years there has been a shift to cereals, while oilseeds have doubled their share over the period, to the detriment of fodder crops, sugarbeet and potatoes.

Production and consumption

Cereals area expanded quite rapidly in the last two years with production reaching 7.2 mio t in 1994. Consumption has, at the same time, been falling, mainly due to reduced feed use as livestock production has continued to decline. Surpluses have therefore appeared, leading to a record export level of 520,000 t in 1994.

Oilseeds area has more than doubled since 1989 reaching 250,000 ha in 1994 and an output of over 500,000 t. Almost 90% of oilseed production is rapeseed, which has been meeting domestic demand, in particular the rising demand for vegetable oil and for non-food uses (biofuel).

For other arable crops such as potatoes and sugar beet planted area and production have declined in recent years, for the latter in line with the drop in sugar consumption.

Livestock numbers have been reduced quite dramatically over the transition period, especially cattle (-40%) and sheep (-50%). Milk, beef and pork production continued to decline in 1994. For pork output even dipped below demand, leading to a sharp rise in producer prices. Poultry, on the other hand, showed a slight increase in production as demand for poultrymeat has started to rise again.

Trade

The regional breakdown of the agro-food trade flows shows that the most important markets for Czech exports are the European Union and Slovakia, with shares of 37% and 23%, respectively, in 1994.

On the import side the EU is also the most important trade partner with a share of 48% in 1994, followed by Slovakia with 13%. Although the Czech Republic and Slovakia form a customs union, trade was hampered in 1994 by problems over certification.

The commodity structure of agro-food exports is still dominated by dairy products for which the available export subsidies are mostly used. Their share of exports decreased slightly from 21% to 18% in 1994. The second most important group of exported products is beverages (beer and spirits) with a share of 14% in 1994. On the import side the main categories are fruit and vegetables with a share of 21% in 1994.

Farm structures

In the pre-transition era over 90% of cultivated land was in the hands of collective and state farms with average sizes exceeding 2,500 and 6,000 ha, respectively.

The main objective of the reform policy of the 1991-94 period was to re-establish private property rights in agriculture through restitution of land and assets to former owners, transformation of the agricultural cooperatives and privatization of the state farms.

Basically three forms of farming have emerged, transformed coops, other companies (joint stock or limited liability) and individual (family) farms.

By the beginning of 1994 over 50,000 individual farms with an average size of 15 ha (73 ha if the category of smallest holdings up to 10 ha is excluded) had been formed, cultivating about 20% (ie 780,000 ha) of total agricultural area, of which on average 37% was in ownership, the rest being leased. The large majority of individual farms (over 40,000) were in the category of up to 10 ha with an average size of 2.3 ha, mainly producing for own consumption or local markets. The remaining 10,000 could be considered as professional farms, with the largest of over 100 ha farming on mainly leased land and rented equipment from the state sector on the basis of annual contracts.

The transformed coops (over 1300 in number) were still managing half of agricultural land with an average size of 1600 ha. The transformation of all collective farms into (producer) cooperations of private owners was speeded up by making ineligible for state support those enterprises which had not settled their restitution claims.

Other agricultural enterprises, ie joint stock and limited liability companies (nearly 1300 in number with an average size of over 600 ha), were managing over 15% of agricultural land.

The process of privatization of state farms was slowed down by postponement of the deadline for restitution claims. In the meantime the sale of state assets has started, while the decision on sales of state land has been delayed. Non-privatised state property has been rented out on the basis of annual contracts.

Up- and downstream

In the pre-transition era the up- and downstream sectors of agriculture were largely state-owned. A small percentage (mostly smaller enterprises) were privatised by way of restitution to the original owners. Most other state agricultural input and food processing industries were taken up in the two general waves of voucher privatization in 1993 and 1994 and a certain number of state enterprises was liquidated.

Although the ownership changes in these sectors have taken place and for instance the number of food processors has jumped from 62 large state companies in 1989 to over 460 private companies currently, the restructuring to deal with overcapacity, in particular in the dairy and meat sectors, has only just started. It will therefore take some time for the new relationships in the food chain to settle down.

Support policy

Several types of state support to agriculture can be distinguished, ranging from market support to general services. In 1994 expenditure on agriculture amounted to nearly 7 bio CZK (over 200 mio ECU), while for 1995 expenditure is forecast at 6.6 bio CZK (183 mio ECU). About two thirds of the expenditure is funnelled through two funds, the State Fund for Market Regulation (SFMR) and the Support and Guarantee Fund for Farmers and Forestry (SGFFF).

Market support in the form of intervention buying, export subsidies and border protection has been introduced since 1991 for some of the main commodities (milk and milk products, beef, pork, wheat and sugar). On average about half of SFMR expenditure has been on milk and milk products.

In general the SFMR operates less by intervention buying and more by encouraging exports with refunds based on expected surpluses. Indirectly domestic agricultural prices are upheld by exporting surpluses and preventing imports through tariffs.

Price support levels for milk and beef are half and 40% of those in the EU, while for wheat the price support level will be about 65% of the EU level,

when the EU cereals price cuts will have been fully implemented in 1995/96.

Investment support was introduced to compensate for lack of financial resources in agriculture. The SGFFF provides guarantees to the banks for the loans they make to farmers (short term loans to finance operating costs and mostly medium and long term loans to finance investments in machinery and equipment) and subsidizes part of the interest rate due on these loans. Another type of investment support is in the form of grants to further environmental investments such as afforestation and reconversion of arable land into grassland.

An increasing share of the agricultural budget is going to direct payments as income support to farmers in less favoured areas and to promote environmentally friendly farming.

GATT commitments

As far as the ceiling on domestic support is concerned, this is not likely to be a limiting factor. As far as border protection and market access is concerned import tariffs are for most products already near to the levels allowed under GATT and offer a relatively high level of protection. Minimum access tariff quotas are to be opened for a number of products such as beef, pork and poultrymeat and dairy products. Subsidized exports are allowed for a number of products including cereals, sugar, beef, pork, poultrymeat, dairy products and fruit and vegetables.

Outlook

The Czech Republic is currently in the process of elaborating its longer term strategy for agricultural policy in the period 1996-2000/2005, ie in the run up to possible entry into the EU. The likely outcome is a continuation of the status quo with limited market support (for wheat, milk and beef), extension of the investment support policy, and direct support for farms in less favoured areas.

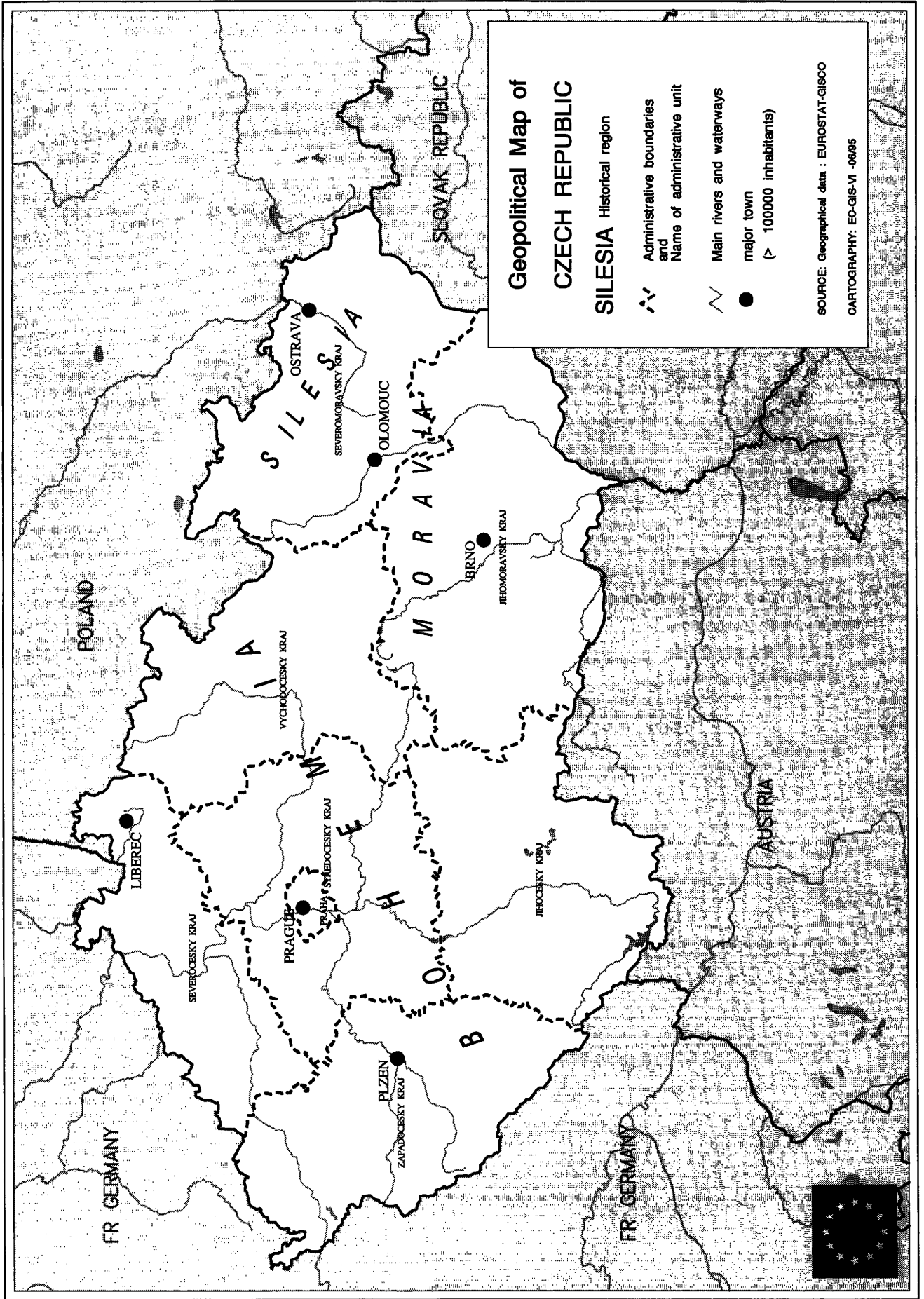
Tentative projections for the main commodities show that the Czech Republic would be self sufficient for most of these and even a small net exporter without breaching its GATT obligations.

Table 1: The Czech Republic in comparison with other CEECs and EU-15

	popul.	GDP	GDP pc	tot. area	agric. area		arable area		agric. production		agric. employment	rainfall	
	(mio)	(bio ECU)	(ECU)	(mio ha)	(mio ha)	(% total)	(mio ha)	(ha pc)	(bio ECU)	(% GDP)	(000)	(% tot. empl.)	(mm/year)
Bulgaria	8.5	9.4	1110	11.1	6.2	55.9	4.0	0.47	1.131	12.0	694	21.2	550
Czech Rep.	10.3	26.7	2586	7.9	4.3	54.3	3.2	0.31	0.871	3.3	271	5.6	491
Estonia	1.6	1.5	938	4.5	1.4	30.6	1.0	0.63	0.266	10.4	89	8.2	600
Hungary	10.3	32.5	3150	9.3	6.1	65.8	4.7	0.46	2.068	6.4	392	10.1	600
Latvia	2.6	2.2	850	6.5	2.5	39.2	1.7	0.65	0.232	10.6	229	18.4	680
Lithuania	3.8	2.3	627	6.5	3.5	54.0	2.3	0.62	0.259	11.0	399	22.4	625
Poland	38.5	73.4	1907	31.3	18.6	59.5	14.3	0.37	4.648	6.3	3661	25.5	550
Romania	22.7	21.8	961	23.8	14.7	61.9	9.3	0.41	4.500	20.2	3537	35.2	635
Slovakia	5.3	8.7	1643	4.9	2.4	49.0	1.5	0.28	0.512	5.8	178	8.4	611
Slovenia	1.9	9.8	5018	2.0	0.9	42.7	0.2	0.13	0.250	4.9	90	10.7	1350
CEEC-10	105.4	188.3	1786	107.7	60.6	56.2	42.3	0.40	14.7	7.8	9540	26.7	
EU-15	369.7	5905.1	15972	323.4	138.1	42.7	77.1	0.21	208.8	2.5	8190	5.7	





All figures are for 1993. Rainfall long term average.

Source: DGV CEEC dataset



**Geopolitical Map of
CZECH REPUBLIC**

SILESIA Historical region

-  Administrative boundaries and Name of administrative unit
-  Main rivers and waterways
-  major town
-  (> 100000 inhabitants)

SOURCE: Geographical data : EUROSTAT-GISCO
 CARTOGRAPHY: EC-GIS-VI -06/95



Part I: General overview

1. Geography, climate and demography

With a total area of 78,864 square kilometres the Czech Republic ranks in size between Austria and Ireland. Its neighbours are Poland to the north, Slovakia to the east, Austria to the south and Germany to the west.

A little over half of the area of the Czech Republic or 4.3 mio ha is agricultural land of which arable land makes up 3.2 mio ha. The proportion of foot-hill and mountain areas of the Czech Republic is high, approximately two thirds of land area. Of agricultural area about 40% is lowland area. Forests cover a third of the total area (2.6 mio ha).

The climate in the Czech Republic is continental with warm summers and cold winters. In summer, the maximum temperature ranges from 32 to 35°C, in winter, the minimum temperature ranges from -12 to -20°C. The hottest month is July with an average temperature of 19.9°C and the coldest one is January with -0.8°C. The driest period is January-March with an average rainfall of 20-22 mm and the wettest period from June to August is characterised by an average rainfall of 65-77 mm. Long-term average annual rainfall amounts to 491 mm.

The Czech Republic consists of three distinct historic "lands" - Bohemia, Moravia and Silesia. The separatist sentiment is not strong. At the time of the 1991 census, 81% of the population of the Czech Republic claimed Czech nationality, 13% described themselves as Moravian, 3% were Slovaks and 2.5% belonged to other nationalities.

At the end of 1994 the Czech Republic had a population of 10.3 mio. The rate of growth has been declining since 1975 and Czech society is getting older. A total of 19.4% of the Czech population is under working age (15 years), 20.4% is over retirement age. Total population is expected to reach 10.4 mio by the year 2000.

Around 35% of the population lives in towns of over 50,000 inhabitants. The main cities are Prague, the capital, with a population of 1.3, and Brno with 400,000 inhabitants. Rural areas are home of about 2.6 mio people. Although agriculture remains an important feature of the countryside, 74% of the rural population is employed in other sectors.

2. Historical background.

The Czech Republic became an independent nation on 1 January 1993 with the division of Czechoslovakia into two separate countries: the Czech Republic and the Slovak Republic. Czechoslovakia was itself a comparatively recent creation having been formed when the Czech lands (Bohemia, Moravia and part of Silesia) were brought together with Upper Hungary (Slovakia) and Ruthenia (now part of Ukraine), following the collapse of the Austro - Hungarian empire at the end of the First World War, in 1918. The country inherited 70 % of the industrial capacity of the former empire, most of which was located in the Czech lands, and existed as a liberal democracy until its dismemberment as a result of the 1938 Munich agreement and the German invasion a year later.

The end of the Second World War saw the restoration of Czechoslovakia as a democratic state (although the country's territory was reduced slightly as Ruthenia became part of the Soviet Union). However, democracy was short-lived as the

Communist Party (CPCS) seized power in February 1948 and began the "Stalinisation" of the country's economic and political system (ie nationalisation of industry, introduction of centralised planning, collectivisation of agriculture and elimination of political opposition).

The relative liberalisation of the Soviet Union introduced by Khrushchev during the late 1950s contributed to the emergence of reform-minded communists, led by Alexander Dubcek, within the CPCS. The reformers sought to combine socialist economic principles with political democracy and greater individual liberty under the slogan "socialism with a human face". This process culminated in what became known as the "Prague Spring" of 1968. Czechoslovakia's experiment was crushed by the invasion of Warsaw Pact troops in August 1968. The reversal of Dubcek's reforms was accompanied by a period of political repression. However, a dissident movement remained alive, later becoming associated with a statement of democratic principles and human rights known as "Charter 77", and played an important role in the run up to the changes of 1989.

Although the process of decentralisation had started earlier, one lasting effect of Dubcek's 1968 reforms was the introduction of a federal political structure and division of the country into two administrative entities: the Czech and Slovak states.

The intensification of demands for reform in Czechoslovakia as in other eastern European countries and the so called "Velvet Revolution" were largely made possible by developments in the Soviet Union. On 24 November 1989, Prague saw its biggest demonstration in twenty years when the people demanded the resignation of the government and free elections. On 29 December 1989 Vaclav Havel, a member Charter 77 and imprisoned writer, was elected president of Czechoslovakia.

3. Political situation

During the "Velvet Revolution" Vaclav Havel with other dissident groups created Civic Forum and its Slovak counterpart Public Against Violence. These groupings obtained a clear victory in the first free elections in 44 years which took place in June 1990. In 1991 the main political grouping Civic Forum split into distinct parties: Civic Democratic Party (CDP), Civic Democratic Alliance (CDA) and Civic Movement. A similar realignment on the political scene took place in Slovakia.

The general elections in June 1992 confirmed the realignment of the Czech and Slovak politics when the CDP, led by Vaclav Klaus, declared itself in favour of a rapid economic transformation and the MFDS (Movement for a Democratic Slovakia), led by Vladimir Meciar, advocated slower reform. Immediately after the elections Klaus and Meciar held discussions about the future of the federation. Economic reform and Slovak independence appeared as the key questions. In November, after Klaus and Meciar each for their own reasons had agreed that division of the federation was the preferred solution, the Federal Parliament narrowly passed (with the required three fifths majority) the constitutional law on the separation of Czechoslovakia, leading to the creation of two independent countries on 1 January 1993. In the mean time president Havel had announced his official resignation as head of state of the federation.

The Czech Parliament has 200 seats of which, based on the 1992 results, 105 are occupied by members of the government coalition formed by prime minister Klaus' CDP (76 seats) and the junior partners CDA (14), Christian Democratic Party and Christian Democratic Union-People's Party (15). The main opposition parties are the Communist Party (35) and Social Democrats (16). Recent opinion polls and local elections have confirmed the strength of the CDP. At the next parliamentary

elections, scheduled for June 1996, the CDP is expected to further reinforce its position.

At elections on 26 January 1993, parliament narrowly elected former federal president Vaclav Havel as the president of the Czech Republic. However, the new constitution which was approved by the former Czech National Council on 15 December 1992 gives the president considerably less power than did the constitution of Czechoslovakia.

4. Economic situation

In the five years of transition from a centrally planned to a market oriented economy a relative degree of macro-economic stability has been maintained under the influence of the government's tight fiscal and monetary policy.

Table 2: Main economic indicators

		1990	1991	1992	1993	1994(e)	1995(f)	1996(f)
GDP	% change	-1.2	-14.2	-6.4	-0.9	2.6	4.2	4.5
private sector/GDP	%	12.3	17.3	27.7	45.1	56.3		
consumer price	% change	9.6	56.7	11.1	20.8	10.0	9.0	7.0
unemployment	%	0.8	4.1	2.6	3.5	3.2	4.0	4.5
budget balance	% GDP	-0.2	-2.1	-0.2	0.1	1.0	0.0	0.0
government debt	% GDP				17.2	15.3	13.1	
exchange rate	CZK/ECU	22.9	36.5	36.6	34.1	34.1	36.3	34.8
current account	mio ECU			-235	370	251		
trade balance*	mio ECU	-511	-388	-1413	191	-364	-900	-1000
foreign debt	bio ECU	5.0	5.8	5.5	7.3	8.7		
intern. reserves	bio ECU			2.8	5.3	7.5		

Source: national statistics, CSO and CNB. Forecasts based on DG II, OECD and EIU projections.

*1990-92 Czechoslovakia

In 1994 the economy turned round and grew by an estimated 2.6% after four years of contraction induced by the transition. Main source of growth was a strong recovery in private consumption and investment.

For 1995 and following years a further increase in the rate of growth is expected in the range of 4 to 5%, mainly due to expansion in the services sector (in particular tourism) and in industry and construction, while growth in agriculture is expected to remain stable in the order of 3%. The official GDP is still about 18% below the 1990 level, although estimates by the Czech National Bank (CNB) and the Czech Statistical Office (CSO) for unrecorded activity (in the rapidly growing private sector) suggest a fall in GDP of 12 to 13% since 1990. If current growth rates are maintained the gap would be closed by the end of the century.

Inflation is expected to be brought to single digits as the koruna remains pegged to the dollar and D-mark and the government continues to balance the budget (the latter even showed a small surplus in recent years). The sharp rise in 1993 from the underlying rate of around 10% was due to the introduction of a value added tax.

Fiscal policy is aimed at balancing the budget and stabilizing government debt at its 1993 nominal level, while the share of public expenditure in GDP is gradually reduced (from 45% in 1993 to an expected 42.1% in 1995).

Unemployment has remained surprisingly low in view of the contraction of the economy during transition, although the rate is expected to go up as further restructuring and rationalization of the now to a large extent privatized economy takes place. By the end of last year the second wave of voucher privatization was finished, bringing the share of privately owned companies to around 80%, producing 56% of national output³. The remaining state monopolies and enterprises (in telecommunication, railways, engineering, electricity, steel and coal) will be (partially) privatised through direct sales in the next few years.

The trade balance has tended to deteriorate as imports (especially of consumer goods) have outpaced exports. In 1994 the growth in domestic demand attracted higher imports, while export growth was hampered by a significant fall in exports to Slovakia, with which the Czech Republic forms a customs union⁴. In recent years trade has been reoriented towards western markets, mainly the EU (over 45% of imports and exports), while the share of the former COMECON countries has dropped substantially.

The relative stability of the nominal exchange rate since the 1991 devaluation of the koruna has meant that the currency has appreciated in real terms⁵, gradually eroding the export enhancing and import restraining effects for the Czech producers.

The worsening foreign trade deficit is not expected to cause any serious balance of payments problems. Tourism and the inflow of foreign capital more than compensate the trade deficit and led to an increase in official reserves to an estimated total of 7.5 bio ECU by the end of 1994, to a large extent offsetting the Czech Republic's foreign debt estimated at about 8.7 bio ECU. The favourable financial position of the country has encouraged the government to consider speeding up the move to full convertibility of the koruna. The relevant currency law, removing the remaining obstacles to capital transfers, is expected to be passed by parliament by the middle of 1995, after which external convertibility could be put into operation.

The inflow of foreign capital has been mainly in the form of portfolio investment and foreign bank loans to Czech firms, although direct foreign investment has started to pick up. Since the fall of the Communist regime the latter is estimated to amount to about 2.5 bio ECU, of which over a fifth went to the consumer goods industry and around 10% to the food & drink industry. Nearly three quarters of foreign investment have come from the EU, with Germany in a leading position.

For the longer term prospects a further acceleration of growth above the level foreseen would probably need larger foreign investments than currently taking place to carry out the modernisation of industry and other sectors.

³ A large part of the shares is in hands of a limited number of investment funds set up by the banking sector, which is still semi-state controlled.

⁴ In particular Czech agro-food exports to Slovakia were affected due to a problem on mutual acceptance of health and quality certificates. Slovakia also introduced an import surcharge of 10% in 1994.

⁵ as inflation has generally been higher in the Czech Republic than in its main trading partners (ie the EU).

Part II: Agriculture

1. Agriculture in the overall economy

Although the economy as a whole reached a turning point in 1994, agricultural production as measured by gross agricultural product¹ at constant prices continued to decline.

Table 3: Importance of agriculture

		1989	1990	1991	1992	1993	1994(e)	1995(f)	1996(f)
GDP	% change	4.5	-1.2	-14.2	-6.4	-0.9	2.6	4.2	4.5
ag. production	% change	2.3	-2.3	-8.9	-12.1	-1.2	-1.9	2.2	2.9
ind. production	% change	1.7	-3.0	-14.7	-13.7	-5.4	2.2	4.3	5.0
services	% change					5.6	3.3	4.4	4.2
share ag/GDP	%	6.3	6.2	5.0	3.4	3.3	3.0		
share ag/employ.	%	9.9	9.6	8.1	6.3	5.6	5.1		
share agro-food/exp.	%	5.6	6.6	8.9	8.6	8.0	7.7		
share agro-food/imp.	%	8.0	7.8	9.0	8.2	8.2	9.6		

Source: CSO, CNB; RIAE; DG II. Forecasts based on DG II, EIU.

The share of agriculture in total GDP, already relatively low compared to some other CEECs and EU members, dropped further during transition from over 6% to around 3% currently (measured in current prices). Also the share of agriculture in total employment - although higher than the share in GDP, indicating a lower labour productivity than in the rest of the economy and/or price and income pressure - dropped from 10 to 5%. The strong decline in agricultural employment is partly a statistical effect as staff of the former cooperative and state farms not working in agriculture were reclassified as being engaged in other sectors (eg industry and services). The total number of persons employed in agriculture (including self-employed) dropped from 533,000 in 1989² to 246,000 in 1994³.

The share of agricultural and food exports in total exports increased as surplus production was disposed of in the first years of the transition, but has been declining again in recent years. The share of agro-food imports in total imports has varied around 8% with a tendency to increase in 1994. The balance in agro-food trade has shifted from a large export surplus in 1991 to a deficit of 7.6 bio CZK (223 mio ECU) in 1994, after two years of near equilibrium in 1992 and 1993.

2. Landuse

Of the total area of 7.9 mio ha over half is used for agricultural purposes and a third is covered with woods.

¹ See glossary

² About one third of workers in agricultural cooperatives in 1989 were engaged in activities other than plant production and animal husbandry. Especially cooperatives in less favoured areas developed other activities outside agriculture to supplement their income. They were able to do so as they enjoyed a greater degree of freedom than the regular state enterprises in industry and services.

³ The numbers for recent years are estimates as more precise data on for instance full- versus part-time employment in agriculture are still missing.

Table 4: Overview of land utilization

total area*		7866	% tot. area	
of which:	inland water	158	2%	
	forest	2630	33%	
	util. ag. area	4261	54%	% uaa
	of which:	arable land	3158	74%
		perm. grassl.	888	21%
		perm. crops	77	2%

* 1000 ha, 1.1.1995. Source: CSO, RIAE

Included in total agricultural area are the so called garden plots, on which fruit and vegetables are grown for own consumption and some livestock is held, the area of which has remained stable at around 158,000 ha.

2.1 Agriculture

Of the utilized agricultural area nearly 75% is arable land. The latter has been slightly decreasing in recent years, while grassland has increased.

Table 5: Allocation of arable land to the main crops

		1989	1990	1991	1992	1993	1994(e)	94/89
Arable area:	000 ha	3232	3219	3184	3175	3174	3158	98
cereals	000 ha	1662	1640	1612	1583	1630	1750	105
	% arable	51%	51%	51%	50%	51%	55%	
fodder	000 ha	1099	1118	1082	1047	978	903	82
	% arable	34%	35%	34%	33%	31%	29%	
oilseeds	000 ha	122	130	162	166	192	249	204
	% arable	4%	4%	5%	5%	6%	8%	
sugarbeet	000 ha	127	118	119	124	107	91	72
	% arable	4%	4%	4%	4%	3%	3%	
potatoes	000 ha	115	109	113	111	103	82	71
	% arable	4%	3%	4%	3%	3%	3%	

Source: CSO, Ministry of Agriculture, RIAE

A little over half of the arable land is planted to cereals, mainly wheat and barley, and around a third to fodder crops, mostly maize silage for cattle. The other arable crops - oilseeds, sugarbeet and potatoes - are of lesser importance in land use terms. In recent years there has been a shift to cereals, while oilseeds have doubled their share over the period, to the detriment of fodder crops, sugarbeet and potatoes.

2.2 Forestry

The area covered by forest has been relatively stable at 2.6 mio ha. Over 75% are coniferous trees, mainly spruce and pine. A little over half of the wooded areas are commercial forests for timber production, which amounts to between 10 and 11 mio m³ annually. The remainder of the wooded area is classified as protective and special purpose forests, such as protection of water supplies and landscapes.

When the privatization process will have run its course (ie restitution of forests to former owners), it is expected that 56% of forests will be state owned, 15.5% will be owned by towns and communities, 20% will be in the hands of private owners and 2% will be property of communal forest cooperatives. A political decision on restitution of former church forests (6.5%) remains to be taken.

3. Structure of agricultural output

Total agricultural output has contracted by about 28% since 1989 as livestock output dropped by over 30% and crop output by about 20%. The crop sector being less affected, its share in total output has been rising.

Table 6: Gross Agricultural Output and its components

		1989	1990	1991	1992	1993	1994(e)
GAO*	1989=100	100.0	97.7	89.0	78.3	76.4	72.2
crops	1989=100	100.0	99.3	96.4	79.9	83.7	78.7
livestock	1989=100	100.0	96.6	83.9	77.2	71.4	67.6
<i>share crops/GAO</i>	%	41.2	41.8	44.6	42.0	45.1	44.9
<i>share livest./GAO</i>	%	58.8	58.2	55.4	58.0	54.9	55.1
ag. input prices	1989=100	100.0	104.3	178.3	190.0	242.1	261.0
ag. output prices	1989=100	100.0	104.1	103.3	111.3	120.6	126.3
retail food price	1989=100	100.0	111.1	159.8	174.2	203.0	222.1

*Gross Agricultural Output (value of sold production plus own producer consumption) at constant 1989 prices.
Source: CSO

In addition to the reduction in quantities produced agriculture has suffered from a worsening terms of trade. Input prices have tended to increase much faster than producer prices, increasing the cost-price squeeze and leading to a negative income situation for the agricultural sector as a whole. While agriculture has been exposed to restructuring pressures since the beginning of the transition, this has not been the case for the up- and downstream sectors until 1994. The sector has been loss making, although the losses have decreased from 1992 to 1994. For this year a return to profitability is expected.

Table 7: Agricultural account

<i>bio CZK, current prices</i>	1992	1993	1994(e)
gross ag. output	96.9	95.3	93.8
intermediate consumption	70.1	65.6	63.2
gross value added market prices	26.8	29.7	30.6
depreciation	8.3	9.0	9.4
net value added market prices	18.5	20.7	21.2
taxes	2.0	2.3	2.3
subsidies	1.6	1.3	2.3
net value added factor cost	18.1	19.7	21.3
salaries	23.1	22.1	22.0
rents	0.9	0.9	1.0
interest	3.9	4.3	4.5
profit/loss	-9.8	-7.6	-6.2

Source: RIAE, CSO

Traditionally wages in agriculture were high due to the political preference given to the sector under the communist regime. In 1989 the average monthly wage in agriculture amounted to 3455 CZK compared to 3170 CZK for the economy as a whole. By 1993 this relationship was inverted (5100 CZK in agriculture⁴ against 5700 CZK for the economy as a whole), but still wages (which include the salaries to coop members) weighed heavy on the overall result of the farm sector.

⁴ Excluding earnings of individual farmers.

More than half of the losses in agriculture have been concentrated in the state farms, which inter alia have been affected by the process of restitution (of land and assets to former owners) and privatization, and which also in the past were less performing than the cooperatives.

In 1993 state farms still accounted for nearly 20% of agricultural output, after cooperatives with a share of 53%. The share of corporate farms in output amounted to 17% and of individual farmers to 10%.

Due to the weak financial position of agriculture not enough resources are available for further restructuring and modernization.

4. Agricultural production and consumption

4.1 Arable crops¹

The most important arable crop are cereals, primarily wheat and barley, which are planted on over half of the arable area. A considerable proportion of barley, ie 15 to 20%, is traditionally used for malt production and exported.

Table 8: Cereals supply balance

	1989	1990	1991	1992	1993	1994(e)
area (000 ha)	1662	1640	1612	1583	1630	1750
yield (t/ha)	4.69	5.46	4.87	4.15	4.05	4.12
production (000 t)	7793	8947	7845	6565	6600	7210
consumption	7840	8232	7219	7040	6417	6793
o.w. feed use	5222	5748	4796	4550	4038	4300
exports	131	6	420	493	59	520
imports	214	14	8	139	540	188
ending stocks	993	1716	1930	1101	1765	1850

Source: CSO, Ministry of Agriculture, RIAE

After a dip in the first transition years cereals area has started to expand again. With the exception of 1992 (a drought year) production has tended to outstrip domestic demand in recent years. The drop in cereals consumption over the transition period is mainly due to reduced feed use as a consequence of the drop in livestock numbers.

Affected by reduced input levels yields have dropped below their historical trend. A certain recovery can be expected as liquidity in agriculture again increases. Pre-transition yields were comparable to average EU yield levels (somewhat higher for barley, ie 4.4 t/ha in the Czech Republic against 4 t/ha in the EU, and lower for wheat, ie 4.8 against 5.9 t/ha).

The high export levels of 1991, 1992 and 1994 were in part sales from intervention stocks. In 1993 the State Fund for Market Regulation (SFMR) imported food wheat to replenish its stocks, in addition to the normal feed wheat imports. Exports consist mainly of food wheat.

Oilseeds area has been expanding rapidly since 1989. Almost 90% of oilseed production is rapeseed, which has been meeting domestic demand, in particular the increasing demand for vegetable oils and fats. Other oilseeds (sunflower and soyabeans) are mainly imported. Overall the Czech republic moved to a net export position in 1994.

¹ For the crop sector years indicated in the tables are marketing years (July to July).

Table 9: Oilseeds supply balance

Oilseeds	1989	1990	1991	1992	1993	1994(e)
area (000 ha)	121	130	162	166	192	249
yield (t/ha)	2.80	2.62	2.51	1.99	2.17	2.06
production (000 t)	339	341	406	331	417	512
consumption*	339	344	393	322	448	462
exports	0	21	38	32	39	96
imports	0	24	25	23	65	46
stock change	0	0	0	0	-5	0

Source: CSO, Ministry of Agriculture, RIAE

*including non-food use

Although pre-transition rape seed yields were comparable to EU levels, they have dropped quite sharply in recent years.

Since 1991 several factories have been built to produce biofuel and lubricants from rapeseed, creating an additional outlet for rapeseed production. In 1994 53,000 ha of oilseed area were planted for non-food use, producing 125,000 t of rapeseed. The seed processing capacity will be increased to 175,000 t by 1997, expanding biofuel production from 40,000 t to 60,000 t. Investment subsidies are available for the setting up of processing plants and since the beginning of this year a detaxation is applied (the value added tax on biofuel has been lowered from 23 to 5%) to compensate for the higher production cost of biofuel compared to conventional fuel.

Sugarbeet area has declined considerably in recent years, in response to the fall in demand and per capita consumption levels.

Table 10: Sugar supply balance

		1989	1990	1991	1992	1993	1994
sugarbeet	area (000 ha)	127	118	119	124	107	91
	yield (t/ha)	35.4	34.0	33.7	31.2	40.3	35.6
	production (000 t)	4497	4017	4009	3871	4308	3240
sugar yield	%	12.6	13.4	14.2	14.1	13.3	11.6
	t/ha	4.5	4.6	4.8	4.4	5.4	4.1
sugar	production (000 t)	567	540	571	545	575	375
	consumption	495	480	464	432	429	413
	exports	106	60	136	70	144	15
	imports	47	0	23	1	1	3
	ending stocks	13	13	7	51	54	4
	pc use (kg)	47.8	46.3	45.0	41.9	41.5	40.0

Source: CSO, Ministry of Agriculture, RIAE

The drop in area of 15% in 1994 was maybe also induced by the decision of the SFMR to suppress export refunds for sugar, although of the 144,000 t exported in 1993 only 20,000 t were subsidized (compared to 40,000 t in 1992). With much lower beet yields than in the record year of 1993 sugar production decreased by nearly 35% to under the level of demand for the first time. In general the sugar yields of 4 to 5 t/ha as a measure of the combined efficiency at farm and plant level are considerably lower than the EU average of 7 to 7.5 t/ha.

With much less beet to be processed and a high level of exports without subsidy unlikely, the sugar refining industry is facing overcapacity and a reduction in the

number of sugar factories seems unavoidable. In 1994 from a total of 39 sugar factories eight were not in operation.

Also potato area has dropped in recent years. In 1993 very high potato yields forced down farm gate prices, leading in 1994 to a reduction in area of 25% and with lower yields to a drop in production of nearly 50%. The ensuing price rise affected consumption negatively.

Table 11: Potato supply balance

	1989	1990	1991	1992	1993	1994
area (000 ha)	115	109	113	111	103	82
yield (t/ha)	21.1	16.1	18.1	17.7	25.7	16.4
production (000 t)	2422	1755	2043	1969	2650	1342
consumption	2176	1659	1864	1791	2620	1392
o.w. feed	548	248	432	424	1244	312
exports	340	150	292	229	63	5
imports	94	54	113	51	33	55

Source: CSO, Ministry of Agriculture, RIAE

Even in the pre-transition era potato yields of around 20 t/ha were low compared to the average EU level of around 30 t/ha.

4.2 Permanent crops and horticulture

The area under permanent crops and the area used for fruit and vegetable production has remained relatively stable, although the volume of fruit and vegetable production has decreased over the transition period. About two thirds of fruit production are apples, while tomatoes and cauliflowers are the main vegetables.

Table 12: Fruit and vegetable area and production

		1989	1990	1991	1992	1993	1994
fruit	area (000 ha)	27	25	26	24	20	23
	prod. (000 t)	616	429	498	409	460	391
o.w. apples		428	268	339	236	308	244
vegetables	area (000 ha)	35	36	36	34	37	34
	prod. (000 t)	629	608	647	481	573	523

Source: CSO, Ministry of Agriculture, RIAE

Wine grapes are cultivated on around 10,000 ha and wine production amounts to about 560,000 hl per year.

4.3 Livestock

In contrast with the crop sector, where arable area only declined slightly over the 1989-94 period, the livestock sector experienced a considerable liquidation of herds, which as yet has not stopped for cattle and sheep, but has bottomed out as far as pigs and poultry are concerned.

Table 13: Livestock numbers

(000 head)*	1989	1990	1991	1992	1993	1994	94/89
cattle	3481	3506	3360	2950	2512	2161	62.1
o.w. cows	1248	1236	1195	1036	932	830	66.5
pigs	4685	4790	4569	4609	4599	4071	86.9
o.w. sows	312	311	313	326	324	295	94.6
poultry	32479	31981	33278	30756	28220	24974	76.9
o.w. lay. hens	15699	15437	15215	14894	13385	12556	80.0
sheep	399	430	429	342	254	196	49.1
o.w. ewes	205	216	220	180	120	86	42.0

Source: CSO, Ministry of Agriculture, RIAE

* beginning of the year

Cattle and sheep with a nearly 40 and 50% reduction in numbers, and dairy (-33%) have been affected most, while the pig and poultry sectors were affected somewhat less. The large reduction in pig numbers in 1994 is to a large extent due to a change in the statistical collection of data. In fact pig numbers have remained relatively stable as domestic demand for pork has stayed relatively strong.

In the dairy sector milk production continued to decline in 1994 by 9% from the 1993 level. Also the delivery rate to the dairies has dropped from 91 to 84% since the beginning of the transition, indicating a higher on the farm consumption and/or direct sales. Milk yields per cow have started to recover to the pre-transition level of around 4000 kg (which compares to an EU average of around 5000 kg).

Table 14: Milk supply balance

		1989	1990	1991	1992	1993	1994
dairy cows	(000)	1228	1244	1104	982	895	788
yield	kg/cow	4064	3937	3788	3868	3924	4057
milk	production (000 t)	4991	4898	4182	3798	3512	3197
	deliveries (000 t)	4562	4469	3588	3285	2964	2699
	% of prod.	91	91	86	86	84	84
	cons+stock var. (000t)	3572	3577	3289	2939	2656	2538
	exports (000 t)	1421	1324	919	910	941	744
	imports (000 t)	2	3	26	51	85	85

Source: CSO, Ministry of Agriculture, RIAE

Milk production has declined by over a third compared to the 1989 level, but is still exceeding consumption. In 1994 the export of 20,000 t of butter was subsidized as well as some milk powder. Of the individual dairy products the production of butter has declined by 37% since 1989, of skimmed milk powder by 44% and of cheese by 35%.

The continued liquidation of herds upheld meat production in the first years of the transition, but has since started to affect output levels. In 1994 production of beef and veal and of pork declined (by 10.2% and 7.7%, respectively) confirming the downward trend of 1993. Poultry, on the other hand, showed a slight increase in production of 1.2% as demand for poultrymeat has started to rise again.

Table 15: Beef/veal supply balance

	1989	1990	1991	1992	1993	1994
prod. (000 t cwe)	272	268	301	221	205	184
cons. (000 t cwe)	254	245	209	181	182	165
exports (000 t cwe)	19	23	96	41	29	16
imports (000 t cwe)	0	0	1	2	3	9
end. stocks (000 t cwe)	19	19	16	17	13	5
pc cons (kg cwe)	24	24	20	18	18	16

Source: CSO, Ministry of Agriculture, RIAE

The drop in meat production over the transition period has largely followed the drop in demand after the abolition of consumer subsidies. Most affected has been beef, which has seen per capita consumption decline by a third. The initially high surpluses, which have systematically been exported, have tended to decrease in the most recent years. ...

Table 16: Pork supply balance

	1989	1990	1991	1992	1993	1994
prod. (000 t cwe)	552	548	490	525	504	465
cons. (000 t cwe)	543	547	480	497	490	480
exports (000 t cwe)	10	1	14	28	17	5
imports (000 t cwe)	0	0	0	0	0	12
end. stocks (000 t cwe)	23	24	24	20	18	10
pc cons (kg cwe)	52	53	47	48	48	46

Source: CSO, Ministry of Agriculture, RIAE

Consumption of pork, by far the most favoured meat, has also declined but to a lesser extent. Production in 1994 fell below the level of consumption. As a result prices for pork producers have started to move up and there are first indications that pig numbers, especially sows, are on the increase again. For the first quarter of 1995 for both beef and pigmeat the market appears to be in balance.

Table 17: Poultrymeat supply balance

	1989	1990	1991	1992	1993	1994
production (000 t cw)	149	158	156	134	122	124
consumption	135	141	133	126	119	121
exports	10	16	20	16	11	8
imports	0	0	0	0	2	5
stock change	4	0	4	-8	-5	0
pc cons (kg)	13	14	13	12	11	12

Source: CSO, Ministry of Agriculture, RIAE

For poultry, although it has the lowest per capita consumption of the three meats, a turning point seems to have been reached in 1994, with both production and consumption on the rise again. For the last two years also data on production of turkeys, ducks and geese are available, which amounted to about 26,000 t per year. About a fifth of this volume is exported.

5. Agricultural trade

The **regional breakdown** of the agro-food trade flows shows that the most important markets for Czech exports are the European Union and Slovakia. The share of agro-food exports going to the EU12 increased from 34% in 1993 to 37% in 1994 with a growth in (CZK) value terms of over 11%, even though a part of the preferential import quotas granted by the EU in the Europe Agreement were not fully used (see annex 3). The share of agro-food exports going to customs union partner Slovakia decreased from 29% in 1993 to 23% in 1994 due to problems over the functioning of the customs union, in particular the certification of food products. The NIS share of Czech exports increased from 11% in 1993 to 18% in 1994.

On the import side the EU is also the most important trade partner with a share of 48% in 1994 from 43% in 1993, a growth in agro-food imports from the EU of 41% in (CZK) value terms. Slovakia's share in Czech imports decreased from 16% in 1993 to 13% in 1994, although imports from Slovakia still increased by nearly 8%.

Complete trade data for the Czech Republic and Slovakia separately are only available from 1993 onwards. Although also in the past a major share of Czechoslovakia's agro-food trade (around 45% of exports and 54% of imports) was with the West, the former COMECON was the second largest trade partner. Apart from Slovakia agro-food trade with the other CEECs has decreased since 1989. Exports to the former Soviet Union have however rebounded to their pre-1990 levels in 1993 and 1994.

Besides the existing trade agreements with the EU¹ and EFTA countries, the decision earlier this year by the agriculture ministers of the CEFTA² countries to progressively liberalize agro-food trade, could be of influence on the future geographical pattern of Czech agricultural and food trade. At their meeting in January in Warsaw the ministers agreed that the work on mutual recognition of phytosanitary and veterinary certificates should be concluded by 1 July 1995 and proposed to reduce customs duties by 50% as from 1 January 1996 and to eliminate them by 1 January 1998.

The **commodity structure** of agro-food exports is still dominated by dairy products, a surplus production for which the available export subsidies are mostly used. Their share of exports decreased slightly from 21% to 17.5% in 1994. The second most important group of exported products is beverages (beer and spirits) with a share of 14% in 1994.

The commodity structure of agro-food imports has remained relatively stable, the main category being fruit and vegetables with a share of 21% in 1994. The imports of animal feed (mainly protein meals) have continued their downward trend from 11% in 1993 to 9% in 1994 as animal production has declined.

¹ The agreement is currently being renegotiated to take into account the enlargement of the Union to 15 members in 1995 and to adapt it to the GATT Uruguay Round context.

² Central European Free Trade Agreement between Poland, Hungary, Czech Republic, Slovakia, with Slovenia in the process of joining.

A factor which will be of influence on agricultural trade in the coming years are the Czech Republic's commitments in the context of the GATT Uruguay Round (see §7.3).

6. Agriculture and environment

The main environmental problems related to agriculture are erosion, water pollution by agro-chemicals and manure disposal in areas with a heavy concentration of animal production.

About one third of agricultural area is affected by erosion by wind and water of top soils: 13% of area is mildly eroded, 10% moderately and 9% seriously, due to inadequate or unadjusted cultivation techniques. The erosion has led to the silting of rivers and water reservoirs, floods, eutrophization of surface water and loss of soil fertility.

The quality of ground and surface water has been influenced by over-use of fertilizers and chemicals and by a high concentration of animal production³. About 24% of ground water is affected by nitrate pollution, exceeding the level of 50 ppm.

Although the application of fertilizers and agro-chemicals has substantially decreased during the transition, this has not yet affected pollution levels.

Table 18: Fertilizer and pesticide use

		1989	1990	1991	1992
nitrogen	1000 t	418	297	226	187
	kg/ha	99	73	57	44
phosphate	1000 t	269	105	67	50
	kg/ha	64	26	17	12
kalium	1000 t	237	92	55	38
	kg/ha	56	23	14	9
Total NPK	kg/ha	219	122	88	65
Tot. pestic. use	89=100	100.0	81.3	57.0	43.2

Source: RIAE; for fertilizer use years are marketing years, ie 1989=1989/90

For 1994 total fertilizer use is estimated at 90 kg per hectare, indicating that input use is again picking up, while pesticide use dropped further in 1993 to 28% of its 1989 level.

A general problem affecting agriculture and forestry are the acid rains, which have caused damages and losses. Air pollution has affected about 60% of forests, covering the whole northern half of the Czech Republic, especially mountainous areas, and created the image of "dying forests" in the worst affected areas.

³ In the pre-transition era there was a move to very large scale animal holdings, eg 50% of pig producing units had more than 10,000 pigs.

7. Agricultural policy

7.1 Structural reform and privatization

7.1.1 Farm sector

In the pre-transition era over 90% of cultivated land was in the hands of collective (the "old" cooperatives) and state farms with average sizes exceeding 2,500 and 6,000 ha, respectively.

The main objective of the reform policy of the 1991-94 period was to re-establish private property rights in agriculture through restitution of land and assets to former owners, transformation of the agricultural cooperatives and privatization of the state farms.

The basic legal framework for implementing the transformation and privatization in the agro-food sector were laws approved in 1991 and 1992 on the restitution of property, privatization of state enterprises and transformation of cooperatives, and the land law. Apart from the state farm privatization the process was completed from a legal point of view during the period 1993-94.

Basically three forms of farming emerged, transformed coops, other companies (joint stock or limited liability) and individual (family) farms.

By the beginning of 1994 over 50,000 individual farms with an average size of 15 ha (73 ha if the category of smallest holdings up to 10 ha is excluded) had been formed, cultivating about 20% (ie 780,000 ha) of total agricultural area, of which on average 37% was in ownership, the rest being leased. The large majority of individual farms (over 40,000) were in the category of up to 10 ha with an average size of 2.3 ha, mainly producing for own consumption or local markets. The remaining 10,000 could be considered as professional farms, with the largest of over 100 ha farming on mainly leased land and rented equipment from the state sector on the basis of annual contracts. Most individual farms were set up by persons who decided to leave the cooperative and to withdraw their land and assets (in kind).

The transformed coops (over 1300 in number) were still managing half of agricultural land with an average size of 1600 ha. The transformation of all collective farms into (producer) cooperations of private owners was speeded up by making ineligible for state support those enterprises which had not settled their restitution claims. Several reasons contributed to the fact that many of the old collective farms continued as coops such as the fragmentation of ownership (too small plots to start own farming activities), the general atmosphere of uncertainty in the transition years (against the relative security offered by the coop) and lack of entrepreneurial skills and financial resources to set up new entities. A number of producer cooperations (estimated at around 20% of the total) have however entered a second stage of transformation, restructuring their ownership, management and labour force (sometimes by changing ownership form and splitting off activities) and diversifying into downstream activities (of a processing type, eg small scale slaughtering and dairies, or service type, eg in collection and distribution).

Other agricultural enterprises, ie joint stock and limited liability companies (nearly 1300 in number with an average size of over 600 ha), were managing over 15% of agricultural land.

Generally government policy has been neutral to the choice of agricultural enterprise from the legal point of view. There has been no policy favouring one business form over the other, although in the transformation process of cooperatives the conditions

to withdraw land and assets and start a new farm were more favourable than deciding not to farm and to be repaid the value of the privatization share over 7 years, thereby encouraging the establishment of private farms.

The process of privatization of state farms was slowed down by postponement of the deadline for restitution claims. In the meantime the sale of state assets has started, while the decision on sales of state land has been delayed. Non-privatised state property has mostly been rented out on the basis of annual contracts. At the beginning of 1994 there were still 306 state farms and state enterprises with agricultural production left on 657,000 ha (about 15% of agricultural land mainly situated in the less favoured areas), which was not restituted or leased. By the beginning of 1995 this had decreased to between 100,000 and 200,000 ha, mainly belonging to state farms in border areas waiting for privatization (through direct sales or public tender) and educational and research institutions.

The development of the land market is a crucial problem at the present stage of transformation. Lack of liquidity in agriculture and also problems with the physical identification of plots has so far prevented the development of purchasing and selling on the agricultural land market and the establishment of market prices for land. This has also made the banking sector reluctant to accept land as collateral for loans. Although the effective scale of farm operation has been increased by land leasing, this has happened mainly on the basis of short term contracts, which has also not encouraged investment in agriculture. The share of agriculture in national investment fell from 12.6% in 1989 to under 4% in recent years.

7.1.2 Up- and downstream sectors

In the pre-transition era the up- and downstream sectors of agriculture were largely state-owned. A small percentage (mostly smaller enterprises) were privatised by way of restitution to the original owners. Most other state agricultural input and food processing industries were taken up in the two general waves of voucher privatization in 1993 and 1994 and a certain number of state enterprises was liquidated.

The direct participation of foreign capital in privatization remained limited (to the tobacco industry, confectionery and the vegetable oil sector) as the approach chosen was to privatise before trying to attract foreign investors.

For agriculture, which in the pre-transition era dealt with monopolistic state enterprises through long term contracts, the reform process has considerably changed the relationships with the up- and downstream sectors and broken many of the pre-reform links in the food chain. Although the ownership changes in these sectors have taken place and for instance the number of food processors has jumped from 62 large state companies in 1989 to over 460 private companies currently, the restructuring to deal with overcapacity, in particular in the dairy and meat sectors, has only just started. It will therefore take some time for the new relationships in the food chain to settle down and for the farming sector to organize itself vis-à-vis the up- and downstream sectors (eg in the form of service cooperatives, producer associations and other institutions). Farms have been faced with payment problems by the processing industry, which has encouraged some of the cooperatives to develop their own small scale processing capacity.

7.2 Support policies

Several types of state support to agriculture can be distinguished, ranging from market support to general services. In 1994 expenditure on agriculture amounted to

nearly 7 bio CZK (over 200 mio ECU), while for 1995 expenditure is forecast at 6.6 bio CZK (183 mio ECU). About two thirds of the expenditure is funnelled through two funds, the State Fund for Market Regulation (SFMR) and the Support and Guarantee Fund for Farmers and Forestry (SGFFF).

Table 19: Agricultural budget expenditure*

		1992	1993	1994	1995(f)
market support (SFMR)	mio CZK	3314	2675	3754	2704
investment support (SGFFF**)	mio CZK	1089	1425	1680	1221
income support	mio CZK	528	0	473	1775
general services	mio CZK	589	565	800	545
other support	mio CZK	494	144	257	397
TOTAL	mio CZK	6014	4809	6964	6642
	mio ECU	164	141	204	183
tax exemptions	mio CZK	4000	100	100	100

Source: RIAE

* 1992-1994 real expenditure, 1995 forecast

**established in 1994

7.2.1 Market support

Market support in the form of intervention buying, export subsidies and border protection has been introduced since 1991 for some of the main commodities (milk and milk products, beef, pork, wheat and sugar). Market support is given through the State Fund for Market Regulation (SFMR)⁴. On average about half of SFMR expenditure has been on milk and milk products.

In 1994 changes in the intervention mechanism of the SFMR were made. For food wheat an advance payment of 50% of the institutional price (the guaranteed minimum price) was introduced to provide liquidity to agriculture and for export refunds a tender system was introduced to be able to better assess the level of refund needed. Currently the main supported commodities are milk and food wheat.

In general the SFMR operates less by intervention buying and more by encouraging exports with refunds based on expected surpluses. Indirectly domestic agricultural prices are upheld (in theory close to institutional prices) by exporting surpluses and preventing imports through tariffs (and levies prior to 1995). In the case of milk the dairies have to pay the minimum guaranteed price to the producer to be eligible for export subsidies.

⁴ Its stated objective is to stabilize agricultural markets (ie to prevent large price movements either downwards or upwards in the interest of producers and consumers) by purchasing surpluses at a guaranteed price and selling/importing in case of shortages. Its council, chaired by the minister of agriculture, decides on the products to be regulated and the mode of intervention.

Table 20: Price support

			1992	1993	1994	1995
milk	instit. price	CZK/l*	5.4	5.4	5.7	6.0
		ECU/100 kg	15.0	16.2	17.1	16.9
	producer price	CZK/l	5.8	5.9	5.9	6.4
	EU indicative price	ECU/100 kg	31.02	31.57	31.31	30.88
beef	instit. price	CZK/kg lw**	28.0	28.0	28.0	-
		ECU/100 kg cwe	145.6	156.4	156.6	-
	producer price	CZK/kg lw***	26.4	27.6	33.1	36.7
	EU interv. price	ECU/100 kg cwe	399	397	378	358
wheat	instit. price	CZK/t	3000	3120	2970	2700
		ECU/t	82	91	87	74
	producer price	CZK/t	2675	3306	2983	3100
	EU interv. price	ECU/t	193	166	134	124

Source: RIAE, European Commission DGVI

*first quality at 3.6% fat content

**slaughter bulls and heifers

***A-class slaughter bulls

1995 producer prices are RIAE forecasts

Price support levels for milk and beef are between 40 and 50% of those in the EU, while for wheat the price support level will be about 65% of the EU level, when the EU cereals price cuts will have been fully implemented in 1995/96.

Expenditure on market support (ie export subsidies) reached 3.8 bio CZK in 1994 and is forecast to fall by 1.5 bio CZK in 1995, with only two commodities supported.

7.2.2 Investment support

Investment support was introduced to foster structural adjustment and to compensate for the lack of financial resources in agriculture. Before the SGFFF started to operate in 1994, the credit subsidies and soft loans for investment were directly allocated by the state to the farm sector, but this did not work very efficiently in practice. For this reason it was decided that the Fund would provide guarantees for credits given to agriculture by the banking sector and would cover part of the interest payments for these credits.

In addition to the allocation of 2.65 bio CZK from the state budget in 1994 another source of SGFFF funding for its operations on bank loans to agriculture, is the portfolio of shares in food enterprises, privatised in first wave of voucher privatization. These assets, having a nominal accounting value of 3.5 bio CZK were sold to the SGFFF by the Fund of State Property for a symbolic price. A part of these food industry shares is being sold to the public.

In 1994 SGFFF guarantees were used for short term bank loans, financing running costs of farm enterprises, and mostly for medium and long term bank loans, financing investment in buildings, machinery and equipment. The total amount of these loans was 6.2 bio CZK.

The SGFFF provides guarantees (together with the collateral of the borrower) to the banks for the loans and subsidizes part of the interest rate due on these loans. The subsidy rate is decided quarterly. In 1994 the borrower paid on average an interest of 2.7% (compared to a market rate of 14-15%) and the remainder was paid by the Fund. Special benefits are available for special categories such as young farmers and

farmers in less favoured or protected areas (water catchment, landscape maintenance).

All the projects are subjected to economic evaluation by the banks according to rate of return criteria and then certified by the SGFFF.

Because many of the food processing enterprises are not paying their suppliers of agricultural products, and are therefore increasing the financial difficulties of the agricultural sector, the SGFFF is also collecting the debts owed to agricultural producers by the downstream enterprises and paying 60 to 80% of the value of the debt to the farmers.

Another type of investment support is in the form of grants to further environmental investments, ie afforestation, reconversion of arable land into grassland and in 1994 also for reconstruction of vine and hop yards.

Direct budget expenditure on investment support increased from 1.1 bio CZK in 1992 to nearly 1.7 bio CZK in 1994 and is forecast to fall to 1.2 bio CZK in 1995 (see table 19).

7.2.3 Other support policies

An increasing share of the agricultural budget is going to direct payments as income support to farmers in less favoured areas and to promote environmentally friendly farming. The amount is set to more than triple in 1995 compared to 1994.

General services cover items such as genetics, informatics and extension and training services, while the remaining other support is for for instance the eradication of animal and plant diseases and some limited input subsidies.

As far as taxation is concerned certain tax reliefs are granted to agriculture, eg for land taxes. With the introduction of a new tax system in 1993 these tax reliefs were considerably reduced.

7.3 Trade policy

Agricultural trade policy will from 1995 onwards to a large extent be determined by the GATT Uruguay Round commitments on market access and export competition. As far as domestic support is concerned, this is not likely to be a limiting factor for formulating agricultural policy. In 1995 the support ceiling as measured by the Aggregate Measure of Support (AMS) amounts to 16.4 bio CZK (454 mio ECU) to be reduced to 13.6 bio CZK (330 mio ECU) by the year 2000. This compares to a current support level of about 1.5 bio CZK per year⁵, excluding price support, which was not included in the calculation of the base AMS.

As far as border protection and market access is concerned import tariffs are for most products already near to the levels allowed under GATT and offer a relatively high level of protection. In fact the tariff bindings for 1995 were set relatively close to the effective levels of protection in 1994. Minimum access tariff quotas are to be opened for a number of products such as beef, pork and poultrymeat (about 40,000 t in total), dairy products and a few others.

Subsidized exports are allowed for a number of products including cereals, sugar, beef, pork, poultrymeat, dairy products and fruit and vegetables. Of the two

⁵ Even if allowance is made for an annual inflation of 10% during the GATT implementation period support could be kept constant in real terms without breaching the AMS ceiling.

products which are still supported only for cereals recent export volumes exceeded the future level of subsidized exports allowed under GATT. For cereals exports amounted to 520,000 t in 1994, which compares to a ceiling on subsidized exports of 80,000 t in 1995. For dairy products exports of milk powder, butter and cheese in 1994 were still well below GATT limits.

For more details on the Czech Republic's Uruguay Round commitments see annex 1.

Part III: Medium Term Outlook

1. Policy scenario

The Czech Republic is currently in the process of elaborating its longer term strategy for agricultural policy in the period 1996-2000/2005, ie in the run up to possible entry into the EU.

Over the period 1989-95 since the fall of the Communist regime the main objectives have been to complete the privatization of agriculture and the agro-food sector and to balance the main commodity markets after the drop in demand during transition.

For the further development of Czech agricultural policy three basic scenarios with several variants are under discussion¹, taking into account that the main external constraints which will have to be met are the budget available for agriculture, which is not expected to increase much from its current level, and the GATT Uruguay Round commitments.

The three policy scenarios can briefly be characterized as a more interventionist one, a more liberal one and an intermediate one, which is basically a continuation of the status quo.

The interventionist scenario resembles the "old" CAP and would imply an increase in support prices and introduction of supply management measures (quotas, set aside). In the more liberal scenario market support (with the exception of a certain border protection) would be eliminated, direct supports for farms in less favoured areas would be increased, as would funding for the investment support policy. In the intermediate scenario the existing market support through the SFMR for milk, wheat and beef would be continued, as well as the investment support policy through the SGFFF. In addition direct support for farms in less favoured areas would be somewhat increased.

An a priori qualitative assessment of the different scenarios would indicate that the more interventionist scenario would be the more costly one for taxpayers and consumers. With higher price support levels production would tend to rise (leading to higher intervention and export refund costs) and production controls would have to be introduced to limit the surpluses. With higher prices more above average cost agricultural producers would be able to continue in less favoured and other areas. The higher support prices would also be an incentive to intensify production (high input high output agriculture to maximize support) with a negative effect on the environment. Farm incomes for the high volume and below average cost producers would be good.

The more liberal scenario would be the least costly for taxpayers and consumers and for the environment. In the less favoured areas a certain level of extensive farming would be kept, while in the other areas only the competitive producers would survive, certain of which would be able to compete on world markets. As in general production would adapt to domestic demand and surpluses, when arising, could be exported without subsidy, no administrative controls on production would be needed. The farm sector would be smaller than in the previous scenario and after a

¹ The policy formulation exercise is being coordinated by the Ministry of Agriculture with the broad participation of interested groups such as professional organisations, other ministries, institutions, national and foreign experts.

certain period of adjustment and restructuring, facilitated by the investment support policy, profitability of the sector would recover.

The intermediate scenario would of course deliver results in between the two more extreme scenarios and would allow for a longer adjustment than in the liberal scenario. As the intermediate scenario is the most likely outcome under the present government the next paragraph presents a tentative quantification of this scenario for the main commodities.

2. Commodity projections

The economic background to the projections is an overall economic growth of 4-5% per year till the end of the decade and a return to profitability of the up- and downstream sectors of agriculture as restructuring and downsizing is completed.

For agriculture it is assumed that the process of restructuring of ownership and management, in particular of the producer cooperatives which still account for around 50% of agricultural output, will continue through the decade, but without eroding the production base and allowing for a modest growth of output.

The general income growth will lead to a certain recovery of demand for agricultural products, in particular for meat, although the pre-transition per capita levels will not be reached. The recovery in animal production will also increase the feed demand for cereals.

As far as land use is concerned productivity increases and reduced demand for some products (eg sugar) will reduce the need for arable land, which will be partly afforested (reducing agricultural area) and partly reconverted into permanent grassland. For both afforestation and reconversion the current policy framework provides incentives.

Table 21: Land use projection

	1992	1993	1994	2000
agric. area:	4283	4282	4281	4266
arable land	3175	3174	3158	3128
perm. crops	78	77	77	77
perm. grassl.	872	873	888	903
other (eg garden plots)	158	158	158	158
arable land:	3175	3174	3158	3128
cereals	1583	1630	1750	1750
fodder crops	1047	978	903	890
oilseeds	166	192	249	250
sugar beet	124	107	91	71
potatoes	111	103	82	69
pulses	90	94	71	80
other	54	70	12	18

Assuming a stabilization of total cereals area at the current level and a yield growth of 1.5% per year², as the use of inputs recovers to a certain extent from its very low

² By and large this would imply a recovery of cereals yields to their pre-transition level.

level in the transition years, production would nearly reach 7.9 mio t by 2000. With the use of cereals in animal feed increasing again, total consumption would amount to 7.4 mio t, leaving an exportable surplus of around 440,000 t. As far as export commitments are concerned the volume of subsidized exports for cereals is limited to 66,000 t in 2000, so most of the surplus would have to be exported without subsidy. With a domestic price level of around 3500 CZK/t, which would be equivalent to a fob export price of around 120 to 125 US\$/t³, this would appear possible in the light of expected world market price developments.

Table 22: Cereals projection*

	1992	1993	1994	2000
area (000 ha)	1583	1630	1750	1750
yield (t/ha)	4.15	4.05	4.12	4.49
production (000 t)	6565	6600	7210	7856
consumption	7040	6417	6793	7418
o.w. feed use	4550	4038	4300	4947
exportable surplus	493	59	520	438
GATT quantity ceiling				65.5

* years are marketing years

An average annual yield growth of 2%⁴ and a stabilization of oilseeds area at its current level would allow to meet the expected increase in domestic demand, including the growth in non-food use from 125,000 t currently to 175,000 t. Taking into account an access commitment of 18,000 t and the limit on subsidized exports of 9600 t, most of the surplus would have to be exported without subsidy.

Table 23: Oilseeds projection*

	1992	1993	1994	2000
area (000 ha)	166	192	249	250
yield (t/ha)	1.99	2.17	2.06	2.34
production (000 t)	331	417	512	585
consumption	322	442	462	539
imports	23	65	46	18
exportable surplus	32	40	96	64
GATT quantity ceiling				9.6

* years are marketing years

For sugar production is expected to adapt to the decrease in domestic demand, as per capita use declines further from 40 to 35 kg, in part due to the continued substitution of sugar by artificial sweeteners, especially in soft drinks. With an increase in productivity⁵ of 1% per year beet area would be reduced by a fifth compared to current planted area. Any surplus production could be exported with

³ The inflation differential between the Czech Republic and its major trading partners is expected to disappear by the end of the projection period. To take into account the accumulated inflation differential in the intermediate period it is assumed that the nominal exchange rate will be adjusted by 10 to 15% from 29 to 33 CZK/US\$.

⁴ Oilseeds yields declined considerably during the transition, so that a somewhat higher growth rate than for cereals is expected as the farming sector recovers from the transition shock.

⁵ Only a gradual increase in efficiency at farm and plant level is expected leading to sugar yields increasing from 4 to over 5 t/ha.

subsidy up to a limit of 5000 t. The Czech Republic has no quantitative access commitments for sugar.

Table 24: Sugar projection*

	1992	1993	1994	2000
beet area (000 ha)	124	107	91	71
sugar yield (t/ha)	4.4	5.4	4.1	5.2
production (000 t)	545	575	375	370
consumption	432	429	413	368
p.c. cons. (kg)	41.9	41.5	40.0	35.0
imports	1	1	3	0
exportable surplus	70	144	15	2
GATT quantity ceiling				4.9

* years are marketing years

With human consumption and industrial use of potatoes remaining stable, but feed use disappearing, domestic demand would decline to around 1.35 mio t, a level to which production could be expected to adapt. With an increase in yield of 1.5% per year planted area would decrease further compared to the already low 1994 level. The import access commitment of 34,000 t would imply a similar level of non-subsidized exports.

Table 25: Potato projection*

	1992	1993	1994	2000
area (000 ha)	111	103	82	69
yield (t/ha)	17.7	25.7	16.4	19.1
production (000 t)	1969	2650	1342	1350
consumption	1791	2619	1392	1352
imports	51	32	55	34
exportable surplus	229	63	5	32

* years are marketing years

Although overall use of milk is expected to grow as per capita consumption of dairy products increases (in particular fresh products and cheese), production is expected to slightly decrease to further reduce the surplus. With yields expected to increase by 2.5% per year the number of dairy cows will drop further.

While cheese consumption and production are expected to rise again, butter consumption and production are expected to continue the downward trend. For skimmed milk powder (smp) the GATT constraint on subsidized exports of 67,000 t is not expected to be binding. For cheese and butter combined the export ceiling is 63,000 t, which leaves a large margin in view of the expected surpluses. Import access is to be offered for 3,000 t of butter.

Table 26: Dairy projections

		1992	1993	1994	2000
MILK	dairy cows (000)	982	895	788	641
	yield (kg/cow)	3868	3924	4057	4705
	production (1000 t)	3798	3512	3197	3014
BUTTER	production (000 t)	86	86	75	72
	consumption	55	55	55	52
	p c cons. (kg)	5.4	5.3	5.3	5.0
	imports	0	0	0	3
	exportable surplus	31	32	20	23
	GATT quantity ceiling				42
	SMP	production (000 t)	86	97	67
	consumption		22	21	25
	imports		2	2	0
	exportable surplus		70	55	55
	GATT quantity ceiling				67
CHEESE	production (000 t)	77	72	68	81
	consumption	70	63	63	71
	p c cons. (kg)	6.8	6.1	6.1	6.9
	imports	2	7	9	0
	exportable surplus	11	15	16	10
	GATT quantity ceiling				21

For beef a modest growth in per capita consumption of around 1% as incomes grow would increase total consumption to over 175,000 t by 2000. The growing demand for beef would give an incentive to rebuild the cattle herd and to restore production potential to a level closer to that, that had been achieved before the liquidation of the herds in the difficult transition years began. Because of a continued decrease in the dairy herd as milk yields increase, a more specialized beef production would have to be built up, for which the existing policy already provides incentives. Based on only the dairy herd beef production would drop to around 150,000 t. Without a specialized beef herd imports would be needed to meet domestic demand. To cover the gap and to produce the net exports allowed under GATT (in case exports would be subsidized) a suckler herd of around 275,000 cows⁶ (in addition to about 640,000 dairy cows in 2000) would be needed. Total beef production would then amount to 215,000 t and taking into account a minimum access of 11,000 t, the exportable surplus would be around the allowed subsidized exports under GATT.

Table 27: Beef projection

	1992	1993	1994	2000
production (000 t cwe)	221	205	184	215
consumption	181	182	165	176
p. c. cons. (kg)	17.6	17.7	16.0	17.0
imports	2	3	9	11
exportable surplus	41	29	16	50
GATT quantity ceiling				50

⁶ Currently the number of suckler cows amounts to between 20,000 and 25,000.

As for pork there is no market support (apart from import protection) production could be expected to adapt to demand. With a modest annual growth in per capita consumption of 1% demand would rise to 524,000 t by 2000. If market support for the pigmeat sector were to include export subsidies, then - taking into account a minimum access exceeding the allowed quantity of subsidized exports by 15,000 t - production would have to remain below consumption by this margin to respect the GATT commitments.

Table 28: Pork projection

	1992	1993	1994	2000
production (000 t cwe)	525	504	465	522
consumption	497	490	480	512
p. c. cons. (kg)	48.2	47.5	46.4	49.2
imports	0	1	12	25
exportable surplus	28	17	5	35
GATT quantity ceiling				10

Also for poultry production would adapt to demand. In this case, if export subsidies were to be used, production could exceed domestic consumption by 19,500 t in 2000 without breaching GATT commitments.

Table 29: Poultrymeat projection

	1992	1993	1994	2000
production (000 t cw)	134	122	124	164
consumption	126	119	119	139
p. c. cons. (kg)	12.2	11.5	11.5	13.3
imports	0	2	5	3
exportable surplus	16	11	8	28
GATT quantity ceiling				23

With the domestic cereals price at world market level it should however be possible for both the pork and poultry sectors to export without subsidies. Production levels would then depend on the overall competitiveness of the sectors, which in turn would depend on the rate of restructuring and inflow of foreign capital. The expectation is that the pork and poultry industries would be able to satisfy a growing domestic demand and to generate a small surplus.

By the end of the decade the Czech Republic could generally speaking be expected to maintain its position as a net exporter of cereals and oilseeds and of dairy products and perhaps be a small net exporter of poultry and pork.

If the plans within CEFTA to liberalize agricultural trade are realized competition on domestic and nearby markets could be expected from Polish and Hungarian producers for most of these products.

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GLOSSARY/ABBREVIATIONS

- CEECs** Central and Eastern European Countries
- CEFTA** Central European Free Trade Agreement between Poland, Hungary, Czech Republic and Slovakia, also known as the Visegrad four, with Slovenia in the process of joining
- CDA** Civic Democratic Alliance, junior government coalition partner
- CDP** Civic Democratic Party, leading government coalition partner headed by prime minister Vaclav Klaus
- CNB** Czech National Bank
- CSO** Czech Statistical Office
- cwe** carcass weight equivalent (for supply balance sheet calculations)
- CZK** Czech koruna or crown, the national currency (CZK/ECU=34.2, average rate 1994)
- GAO** Gross Agricultural Output, value of sold production plus own producer consumption
- GAP** Gross Agricultural Product, a measure of value added in agriculture (GAP=GAO-IC)
- IC** Intermediate Consumption, costs of inputs of materials and services used by agriculture
- LFA** Less Favoured Areas
- lw** live weight (in tables)
- NIS** Newly Independent States (from the former Soviet Union)
- o.w.** of which (in tables)
- pc cons** per capita consumption (in tables)
- PPP** Purchasing Power Parity
- RIAE** Research Institute of Agricultural Economics in Prague (VÚZE in Czech)
- SGFFF** Support and Guarantee Fund for Farmers and Forestry, credit guarantee fund
- SFMR** State Fund for Market Regulation, main market support body
- SMP** Skimmed Milk Powder
- Visegrad countries** see CEFTA

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ANNEX 1: Uruguay Round commitments Czech Republic

Domestic Support Reduction						
	base: 1986-1988	1995		2000		2000/base % reduction
	bio CZK	bio CZK	bio ECU*	bio CZK	bio ECU**	
Total AMS	17.0	16.4	0.454	13.6	0.330	-20%

Minimum Access				
Tariff quotas selected products:				
	1995		2000	
	quantity (t)	tariff rate (%)	quantity (t)	tariff rate (%)
beef	6675	30	11125	30
pork	14832	30	24720	30
poultry	2085	24	3471	24
butter	1669	32	2781	32
potatoes	25556	50	33583	50
oilseeds	11421	20	17901	20

ANNEX 1 continued

	Export Commitments												
	base: 1986 - 1990			1995			2000			2000/base			
	mio CZK	000 t	ECU/t*	mio CZK	000 t	CZK/t	ECU/t*	mio CZK	000 t	CZK/t	ECU/t**	% value red.	% vol. red.
beef	484.1	63.0	206	455.1	60.8	7485	206	309.80	49.80	6221	151	36%	21%
pork	111.9	12.8	234	105.2	12.4	8484	234	71.70	10.10	7099	172	36%	21%
poultry, eggs, poultry prod.	366.1	28.8	341	344.1	27.8	12378	341	234.30	22.80	10276	249	36%	21%
sheep meat	10.5	0.7	402	9.9	0.7	14559	402	6.70	0.55	12182	295	36%	21%
milk powder	1946.9	84.7	618	1830.1	81.7	22400	618	1246.00	66.90	18625	452	36%	21%
other dairy products	1999.9	79.5	676	1879.9	76.7	24510	676	1280.00	62.80	20382	494	36%	21%
fruit, veg, their products	125.7	10.9	311	118.2	10.5	11257	311	80.40	8.60	9349	227	36%	21%
(oil)seeds, hops	221.6	12.1	491	208.3	11.7	17803	491	141.80	9.60	14771	358	36%	21%
fats/veg. oils	50.3	9.1	148	47.3	8.8	5375	148	32.2	7.2	4472	108	36%	21%
sugar	99.2	6.2	429	93.3	6.0	15550	429	63.5	4.9	12959	314	36%	21%
wine	24.3	4.7	140	22.9	4.5	5089	140	15.6	3.7	4216	102	36%	21%
spirits, beverages	107.7	71.2	41	101.2	68.7	1473	41	68.9	56.2	1226	30	36%	21%
beer	86.4	188.5	12	81.2	181.9	446	12	55.3	148.9	371	9	36%	21%
starch	75.9	15.1	136	71.4	14.5	4924	136	48.6	11.9	4084	99	36%	21%
malt	841.9	309.8	73	791.4	299.0	2647	73	538.9	244.2	2207	53	36%	21%
cereals, flour	230.6	82.9	75	216.8	80.0	2710	75	147.6	65.5	2253	55	36%	21%
Total	6783.0			6376.3				4341.3				36%	

Source: Czech schedule

*CZK/ECU=36.25

**CZK/ECU=41.25

Phare assistance to Czech Agriculture

1. General Framework and Background

In 1994, the first full-scale programme of Phare assistance to the Agriculture sector of the Czech Republic was provided. An allocation of 2 mio ECU for assistance to the Czech Cadastre Office was made in 1992, but no assistance was previously provided for agricultural reform, and this reflected the low priority given by the government to this sector. In addition, the share of agriculture in the economy of the Czech Republic is not as important as in many other countries of Central and Eastern Europe.

Phare Assistance to Agriculture and Land Registration (mio ECU)

Item	1992	1994
Land Registration	2	3
Agriculture		1.5

2. Programme and projects

2.1. Land Registration

The 1992 Phare budget of 2 mio ECU was used to provide computer equipment and expert assistance to develop a data base network throughout the country in order to help clear the backlog in processing of restitution claims, facilitate privatisation operations and promote the establishment of legal titles to land and buildings. In addition to the Phare budget, the government itself financed a major part of this project.

The 1994 Phare budget of 3 mio ECU is currently being used, again together with additional government financing, to provide technical and equipment assistance to strengthen the Land Cadastre Authority and help develop the land registration, information and sales system needed for the emergence of a well functioning market in privately owned land. This project consists of: (i) Expert assistance to help review, design and develop the system, and training for staff in the central office in the management and monitoring of the system; legal and institutional aspects of issuance of land, housing and asset ownership titles will be given special attention; (ii) Equipment assistance will be provided by the programme for land surveying and measurement, digital mapping and publication of maps, topographical and geographical measurement systems, and data base development for land records.

2.2. Agriculture

The 1994 Phare budget of 1.5 mio ECU is currently being used to finance 3 projects:

1. Technical assistance is being provided to help the Ministry of Agriculture in the formulation of its agricultural policy and to help establish a Policy Advisory Unit (PAU). This aims to strengthen the capabilities of the Ministry of Agriculture (and related institutions) to analyse, plan and test market-economic agricultural and rural

sector reforms and develop and implement sub-sectoral competitive policies with a view to preparing the sector for gradual integration into the West-European market. A high-level policy adviser will be assigned to the PAU for a period of 18 months.

2. Additional technical assistance and training will be provided for sub-sector policy reviews in 5 major sub-sectors (meat, dairy, cereals, sugar, and horticulture). The reviews will be undertaken by using existing agricultural and/or policy institutes in the country, in addition to the Ministry of Agriculture, and will focus on the entire food chain from primary production through secondary production to distribution. Specific attention will be paid to the development of European compatible food quality, sanitary, labelling, and marketing standards.

3. Technical and equipment assistance will be provided to contribute to the design and establishment of an agricultural statistics and market information system, with a view to providing a sound basis for policy making in the agricultural sector. In the case of agricultural statistics, specific attention will be devoted to the establishment of a farm management data survey system, on the basis of a representative sample of private farmers, which will be developed with the Ministry of Agriculture and the Research Institute of Agricultural Economics, in co-ordination as required with the Czech national statistical office. As far as the market information system is concerned, this will be developed with representative professional organisations in the primary and secondary agricultural sectors in the Czech Republic and will concentrate on the public dissemination of volume and price information of selected agricultural produce.

In the future, further assistance might be provided by the Phare programme along the same lines.

ANNEX 3: Utilization of the Association Agreement Quotas

PRODUCT (tonnes)	Quota available	Quota utilized	% of utilization	Quota available	Quota utilized	% of utilization
Czech Republic						
	01.01.94-30.06.94			01.07.94-30.06.95		
CEREALS						
Barley	23667	5011	21.2	25400	25400	100.0
Wheat flour	15667	0	0.0	12750	0	0.0
Malt	13250	11121	83.9	31800	31800	100.0
Total cereals	52584	16132	30.7	69950	57200	81.8
DAIRY PRODUCTS						
<i>Milk powder</i>	993	993	100.0	2110	2110	100.0
<i>Butter</i>	390	390	100.0	840	840	100.0
<i>Cheeses</i>	378	378	100.0	650	650	100.0
POULTRY & EGGS						
Duck meat	56	56	100.0	260	260	100.0
Chicken meat	1130	721	63.8	2430	1269	52.2
Chicken meat, deboned	950	0	0.0	2060	102	5.0
Turkey meat	110	95	86.6	230	83	35.9
Total Poultry meat	2246	872	38.8	4980	1714	34.4
Eggs in shell	2100	574	27.3	4530	719	15.9
Eggs (other)	980	51	5.2	2110	70	3.3
Total eggs	3080	625	20.3	6640	789	11.9
	01.01.94-30.06.94			01.07.94-12.05.95		
GOOSE MEAT						
<i>goose meat</i>	530	0	0.0	1140	223	19.6
	01.07.93-30.06.94			01.07.94-30.06.95		
BEEF						
<i>Beef</i>	2330	898	38.6	2500	305	12.2
	1993			1994		
LIVE BOVINE ANIMALS						
Poland, Hungary, Czech & Slovak Republics						
<i>Live bovine animals</i>	39600	39600	100.0	59400	59400	100.0
PIG MEAT *						
Live pigs and meat of swine fresh, chilled, frozen	5350	0	0.0	3865	50	1.3
Processed products	575	0	0.0	438	0	0.0
Total pig meat	5925	0	0.0	4303	50	1.2
SHEEP & GOATS						
Live animals	518	107	20.7	643	4	0.6
Meat	518	4	0.8	643	0	0.0
Total sheep and goats	1035	111	10.7	1285	4	0.3

For cereals, dairy products, poultry & eggs, beef, live bovine animals and pig meat, the quota utilized refers to the quantities for which import certificates were requested. For sheep and goats and goose meat, the quota utilized refers to actual utilization.

* For pig meat, figures available for 1993 relate to Czechoslovakia.

STATISTICAL ANNEX

Land use Czech Republic										
<i>000 ha</i>	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994(e)
total area:	7886	7886	7886	7886	7886	7886	7886	7886	7886	7886
inland water	158	158	158	158	158	158	158	158	158	158
forest	2627	2626	2627	2628	2629	2629	2629	2629	2629	2630
agric. area	4327	4321	4315	4307	4296	4287	4284	4283	4282	4281
other	774	781	786	793	803	812	815	816	817	817
agric. area:	4327	4321	4315	4307	4296	4287	4284	4283	4282	4281
arable land	3269	3260	3253	3242	3232	3219	3184	3175	3174	3158
perm. crops	80	79	79	79	78	78	78	78	77	77
perm. grassl.	823	826	827	829	829	832	864	872	873	888
other (eg garden plots)	155	156	156	157	157	158	158	158	158	158
arable land:	3269	3260	3253	3242	3232	3219	3184	3175	3174	3158
cereals		1672	1676	1655	1662	1640	1612	1583	1630	1750
fodder crops					1079	1100	1065	1032	962	887
fodder beet					20	18	17	15	16	16
tot. fodder					1099	1118	1082	1047	978	903
oilseeds		103	110	115	122	130	162	166	192	249
sugar beet		138	136	109	127	118	119	124	107	91
potatoes		123	122	120	115	109	113	111	103	82
pulses		59	59	58	58	56	71	90	94	71
other					49	48	25	54	70	12

Herd numbers Czech Republic						
<i>(000)</i>	1989	1990	1991	1992	1993	1994
cattle	3481	3506	3360	2950	2512	2161
o.w. cows	1248	1236	1195	1036	932	830
pigs	4685	4790	4569	4609	4599	4071
o.w. sows	312	311	313	326	324	295
poultry	32479	31981	33278	30756	28220	24974
o.w. lay. hens	15699	15437	15215	14894	13385	12556
sheep	399	430	429	342	254	196
o.w. ewes	205	216	220	180	120	86

Commodity balances Czech Republic										
CEREALS		1986	1987	1988	1989	1990	1991	1992	1993	1994(e)
all cereals	area (000 ha)	1672	1676	1655	1662	1640	1612	1583	1630	1750
	yield (t/ha)	4.26	4.49	4.55	4.69	5.46	4.87	4.15	4.05	4.12
	production (000 t)	7128	7532	7532	7793	8947	7845	6565	6600	7210
	consumption				7840	8232	7219	7040	6417	6793
	o.w. feed use				5222	5748	4796	4550	4038	4300
	exports				131	6	420	493	59	520
	imports				214	14	8	139	540	188
	ending stocks			957	993	1716	1930	1101	1765	1850
	soft wheat	area (000 ha)	804	808	818	828	820	797	758	790
yield (t/ha)		4.39	4.92	5.02	4.94	5.64	5.12	4.50	4.27	4.58
production (000 t)		3531	3974	4105	4090	4624	4081	3413	3370	3898
consumption					3547	4236	3414	3689	3075	3256
o.w. feed					2693	2936	2122	2317	1800	1920
exports					31	4	350	301	28	380
imports					4	0	3	15	170	19
ending stocks					516	900	1220	658	1095	1376
barley		area (000 ha)	610	627	601	552	555	583	636	651
	yield (t/ha)	4.32	4.18	4.21	4.74	5.69	4.86	3.95	3.84	3.80
	production (000 t)	2634	2622	2528	2614	3157	2833	2513	2500	2584
	consumption				2648	3068	2572	2586	2512	2690
	o.w. feed				1919	2302	1833	1816	1771	1930
	exports				0	1	130	71	6	115
	imports				0	1	0	36	245	43
	ending stocks			112	78	167	298	190	417	239
	rye	area (000 ha)	109	97	97	134	125	89	66	69
yield (t/ha)		3.61	3.38	3.78	4.16	4.46	3.97	3.64	3.77	3.51
production (000 t)		394	328	367	557	558	353	240	260	281
consumption					439	409	356	290	308	333
o.w. feed					69	68	40	24	10	10
exports					0	1	12	117	9	5
imports					0	0	1	0	34	6
ending stocks				45	163	311	297	130	107	56
oats		area (000 ha)	100	94	89	88	80	75	68	68
	yield (t/ha)	3.67	3.81	3.61	3.19	4.68	4.03	3.06	3.60	2.79
	production (000 t)	367	358	321	281	374	302	208	245	223
	consumption				262	342	342	226	244	214
	o.w. feed				211	285	298	190	205	170
	exports				0	0	0	0	3	6
	imports				0	0	0	0	1	0.3
	ending stocks			19	38	70	30	12	11	14
	maize	area (000 ha)	48	49	39	41	31	35	31	32
yield (t/ha)		4.17	5.06	4.38	4.27	3.16	4.29	3.35	4.88	3.54
production (000 t)		200	248	171	175	98	150	104	156	124
consumption					399	164	181	164	234	238
o.w. feed					377	141	160	147	220	220
exports					0	0	0	0	7	7
imports					209	53	40	87	91	120
ending stocks				101	86	73	82	109	115	114

OILSEEDS		1986	1987	1988	1989	1990	1991	1992	1993	1994(e)
all oilseeds	area (000 ha)	103	111	115	121	130	162	166	192	249
	yield (t/ha)	2.40	2.46	2.77	2.80	2.62	2.51	1.99	2.17	2.06
	production (000 t)	247	273	319	339	341	406	331	417	512
	consumption				339	344	393	322	448	462
	exports				0	21	38	32	39	96
	imports				0	24	25	23	65	46
	stock change				0	0	0	0	-5	0
rape	area (000 ha)	91	97	102	103	105	127	136	167	190
	yield (t/ha)	2.62	2.70	2.99	3.04	2.90	2.74	2.15	2.26	2.38
	production (000 t)	238	262	305	313	305	348	293	377	452
	consumption						339	306	365	398
	exports						27	8	29	67
	imports						18	21	17	13
sunflower	area (000 ha)	0	1	3	5	11	9	11	12	16
	yield (t/ha)	2	2.16	2.33	1.60	2.64	2.33	2.50	2.54	1.94
	production (000 t)	1	3	7	8	29	21	27	30	31
	consumption							12	51	41
	exports							15	2	4
	imports							0	23	14
meal	production (000 t)				213	217	237	200	260	265
	consumption							417	433	426
	exports							150	134	161
	imports							367	307	322
veg. oil	production (000 t)							125	151	170
	consumption							159	183	188
	exports							34	31	44
	imports							68	63	62

OTHER CROPS		1986	1987	1988	1989	1990	1991	1992	1993	1994(e)
pulses	area (000 ha)	59	59	58	58	56	71	90	94	71
	yield (t/ha)	2.31	2.27	2.47	2.17	2.71	2.75	2.26	2.41	2.30
	production (000 t)	136	134	143	126	152	195	203	227	163
	consumption									
	exports									164
	imports									23
sugarbeet	area (000 ha)	138	136	109	127	118	119	124	107	91
	yield (t/ha)	39.21	37.16	34.06	35.41	34.04	33.69	31.22	40.26	35.60
	production (000 t)	5411	5054	3713	4497	4017	4009	3871	4308	3240
	<i>sugar yield</i>				12.6	13.4	14.2	14.1	13.3	11.6
	sugar production (000 t)				567	540	571	545	575	375
	consumption				495	480	464	432	429	413
	exports				106	60	136	70	144	15
	imports				47	0	23	1	1	3
	ending stocks			0	13	13	7	51	54	4
	pc use (kg)				47.8	46.3	45.0	41.9	41.5	40.0
potatoes	area (000 ha)	123	123	120	115	110	114	111	103	82
	yield (t/ha)	20.48	18.47	23.06	21.06	15.95	17.92	17.74	25.73	16.37
	production (000 t)	2519	2272	2767	2422	1755	2043	1969	2650	1342
	consumption				2176	1659	1864	1791	2619	1392
	o.w. feed				548	248	432	424	1243	312
	exports				340	150	292	229	63	5
	imports				94	54	113	51	32	55
flax	area (000 ha)	19	18	20	21	21	15	9	8	10
	yield (t/ha)	3.74	3.56	3.35	4.24	3.90	2.13	2.56	3.13	2.70
	production (000 t)	71	64	67	89	82	32	23	25	27
	consumption									
	exports							0.2	0.2	0.6
	imports							2	2	3

Achévé d'imprimer en juillet 1995
dans les ateliers de la Commission Européenne